

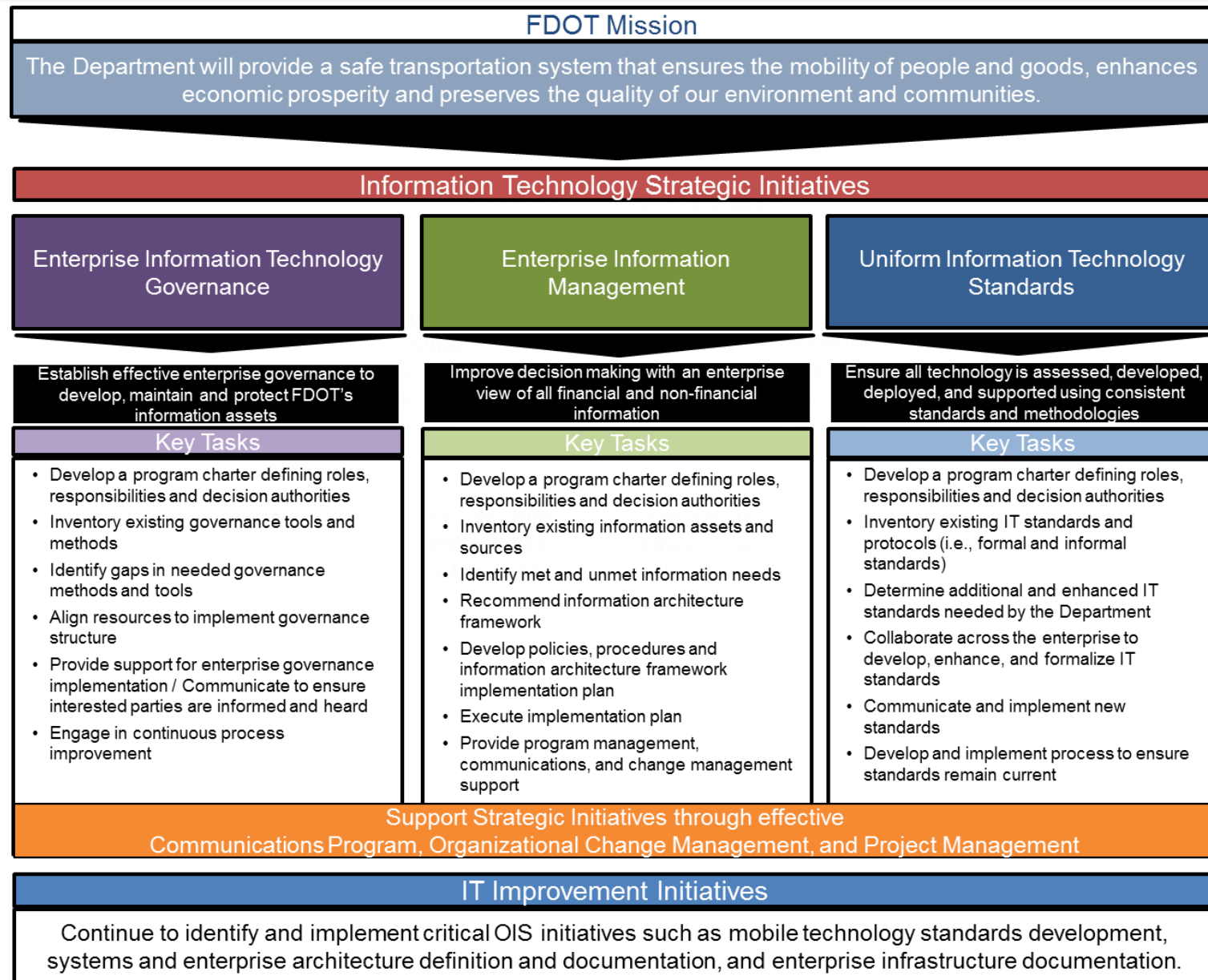
# **Update on Information Technology Strategic Plan**

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**Office of Information Systems**  
August 19, 2015

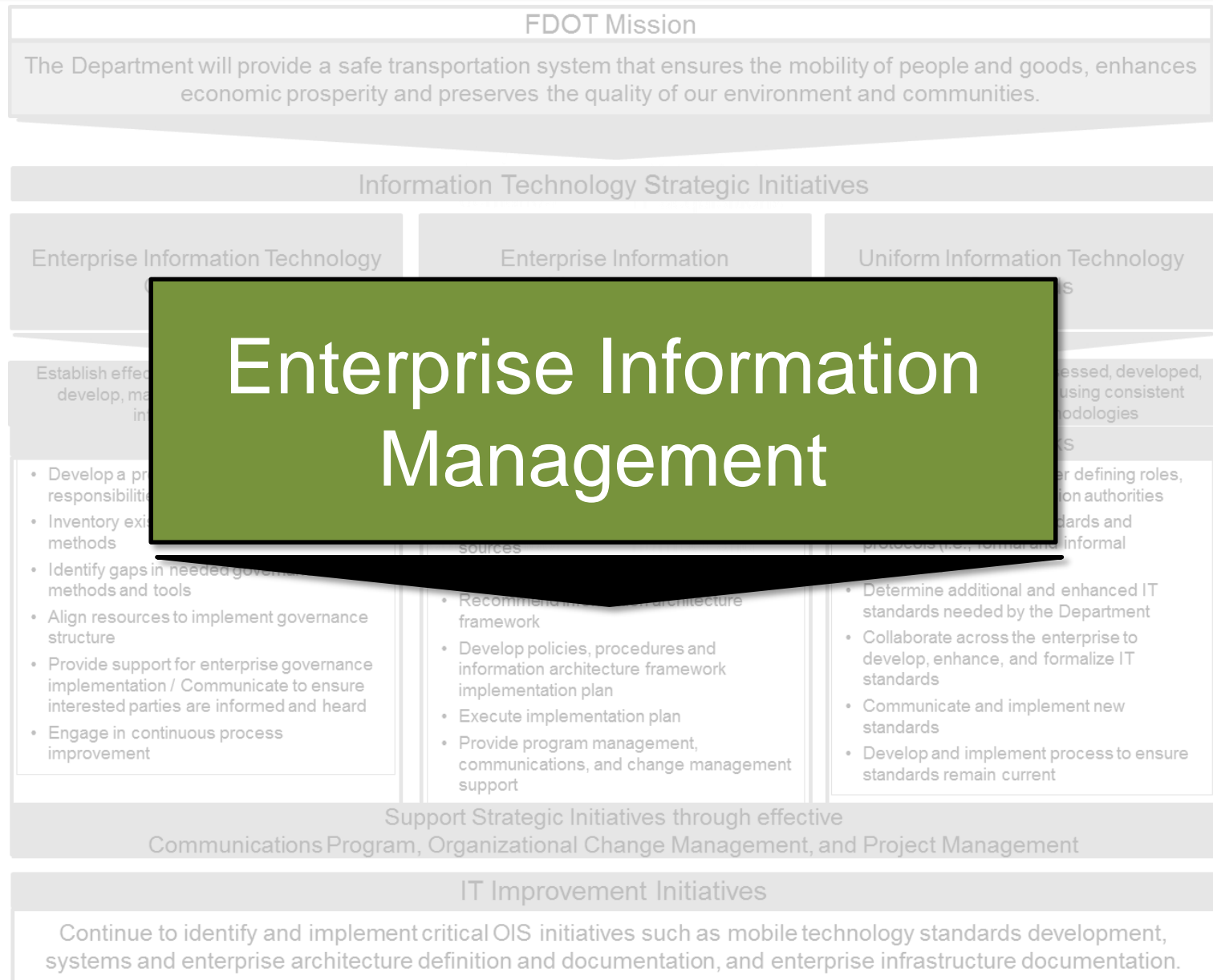
# IT Strategic Plan Overview

- FDOT undertook an initiative to **develop an Enterprise-wide Information Technology Strategic Plan** and sponsored a **critical assessment of the Department's information technology capabilities, personnel, and infrastructure**
- The intent of the process was to **align the Department's technology assets with its functional business units' operational needs** (Central Offices, District Offices, Intelligent Transportation System, and Turnpike Enterprise)

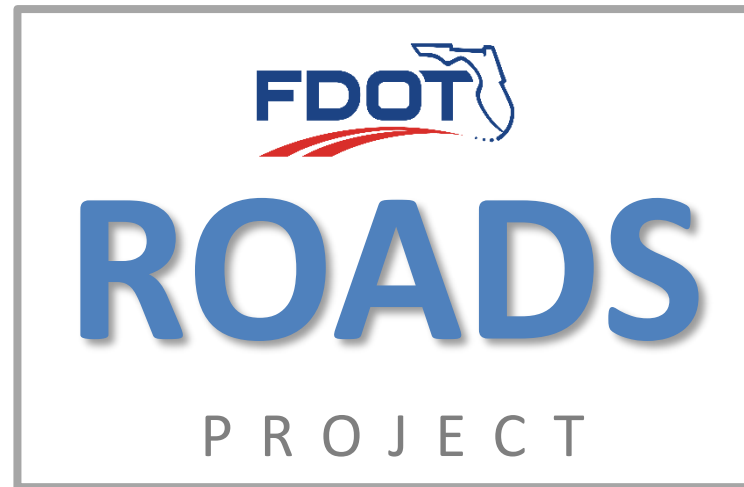
# IT Strategic Plan



# ROADS Project Overview

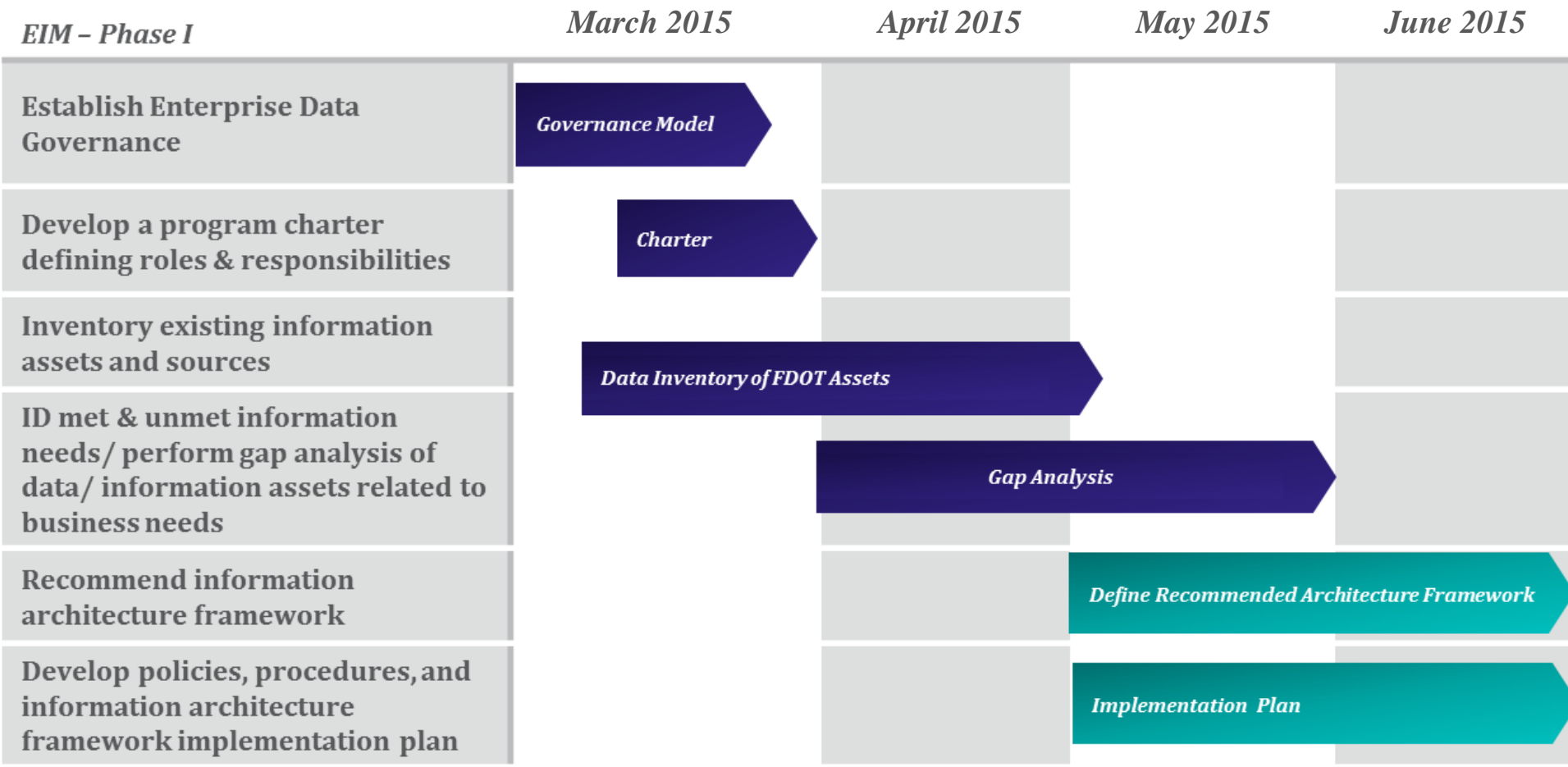


# ROADS Project Overview



In mid-March, the **R**eliable, **O**rganized, and **A**ccurate **D**ata **S**haring (**ROADS**) Project began. The ROADS Project goal is to improve data reliability and simplify data sharing across FDOT to have readily available and accurate data to make informed decisions.

# ROADS Project Phase I Timeline



# The Challenge

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- The Department does not have a unified approach to how information across the enterprise is managed
- The Department is data rich and information poor

# ROADS Project Expected Benefits

- Ensure information is secure, accurate, reliable, and at the appropriate level to empower you to do your job better.
- Provide the ability to access relevant business data more quickly and efficiently by knowing where to find it.
- Reduce the amount of time to locate the data you need and increase the time to analyze the data.
- Effectively share information across our organization to enable better and faster decisions.
- Enable a greater capability to link data together from different Districts, Functional Areas, and Systems.
- Remove the barriers currently in place that prevent the efficient sharing of information.



# ROADS Project Participation

## EMPLOYEE SURVEYS

- ✓ 75 survey invitations
- ✓ 60 minutes to complete
- ✓ 70 questions
- ✓ 230+ responses

## EMPLOYEE INTERVIEWS

- ✓ 2 hour interview durations
- ✓ 7 districts visited
- ✓ 24 interviews completed
- ✓ 270+ participants


# ROADS Project Participation

Public Information Specialist · Procurement · Contracts Specialist · Surveys · Environmental Permits Engineer · CADD Manager · Program Services Manager · Legislative Analyst · Surveyor · Emergency Management · Assistant Secretary · Workstation Technician · District Drainage Engineer · Project Scheduler · GIS Coordinator · Traffic Operations · Maintenance · Personnel Records Supervisor · Pavement Systems · Network Administrator · Workstation Support · Material Operations Engineer · Planner · TSSO Network Support · Estimator · Legal Counsel · Modal Development · Work Program Development · EMO Engineer · ROW Scheduling · Facility Manager · Procurement Manager · Data Analyst · Financial Services Supervisor · Final Estimate


## ENGAGING A WIDE VARIETY OF STAFF

Manager · Construction · Service Desk Lead · In-House Consulting Support · Safety and Health Office · State Materials · P-Card Administration · Personnel Officer · Safety Program Engineer · Performance Management and Training · Rail and Motor Carrier · BSSO District Liaison · Design · Transportation Support Manager · ITS · Design · RCI Coordinator · Project Management · Chief Information Officer · Specifications and Estimates · Contractual Services Administration · Operations Maintenance Manager · Structures Department · Environmental Management · Finance and Accounting · Research Center · Transit · General Counsel · Aviation and Spaceports · Urban Planning · ISD · System Planning GPC · Court Engineer · Pavement Systems · Chief Information Officer · District Secretary · Executive Assistant · Material Operations Engineer · Etc.


# Recurring Themes




It is hard to know what data is available because information is organized around applications instead of around perspectives end users can relate to (e.g., business subject areas).




Data is hard to access because security controls are scattered across many different tools and processes (e.g., RACF, AARF, applications, SharePoint, etc.) throughout 170+ centralized and local systems.



Many districts are moving toward the adoption of the GIS system as the entry point for information searches, but the approach has not been standardized across the districts.



A majority of the district data efforts appear to focus on singular business issues without the added benefit of looking at the data from an overall business view to improve performance or reduce risk.



Teams consistently stated they would like a “one stop shop” to access all information they need in one place, with a “Google Type” Search. Over 40 “Search Criteria” elements have been identified.

# Challenges Identified

**Interviews and survey results revealed multiple challenges, such as:**

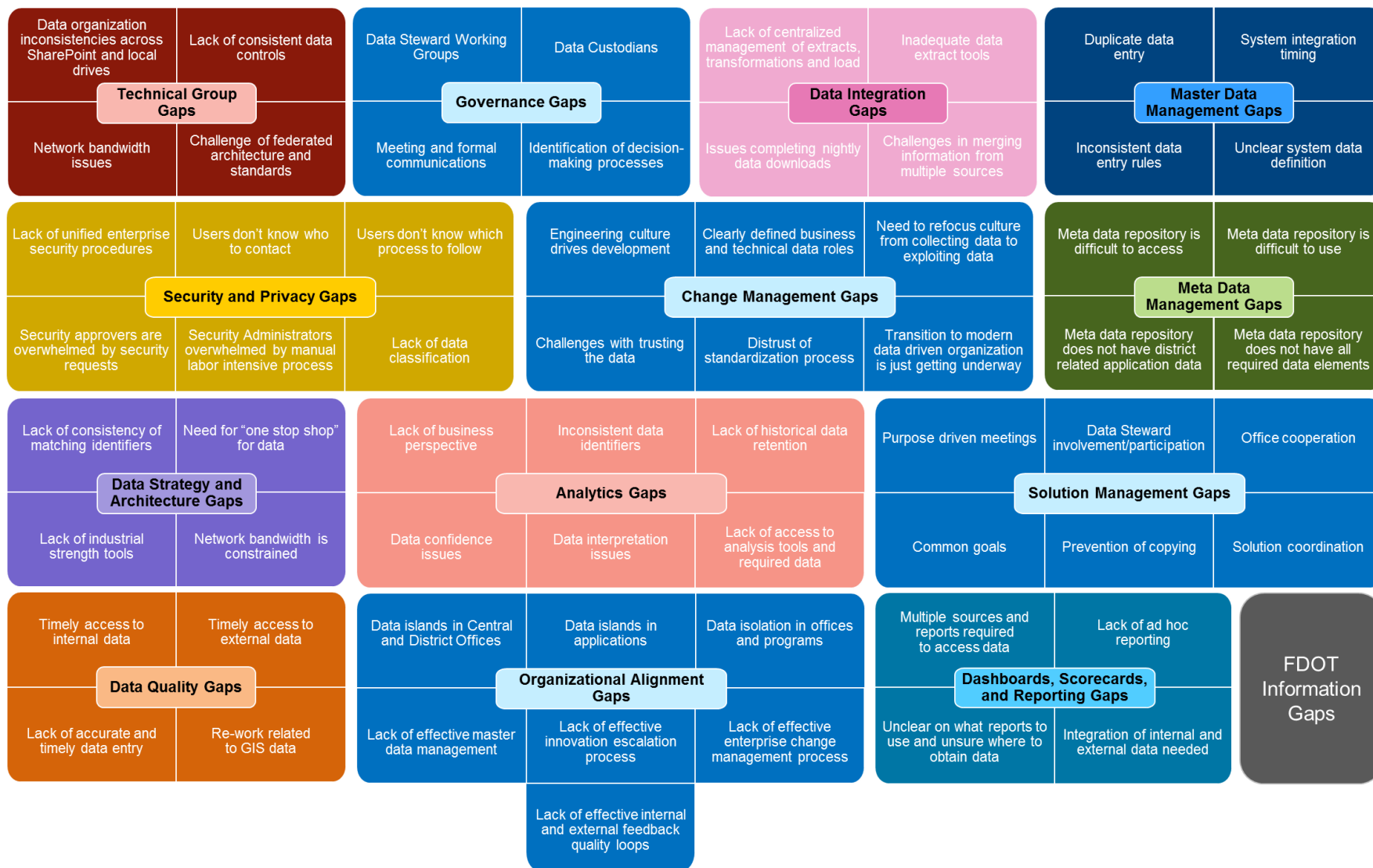
**A heavy reliance on getting data from individual(s) instead of accessing data directly from applications and reporting tools**

**A significant prevalence of manual, home grown processes for copying and transferring data (e.g., via excel spreadsheets)**

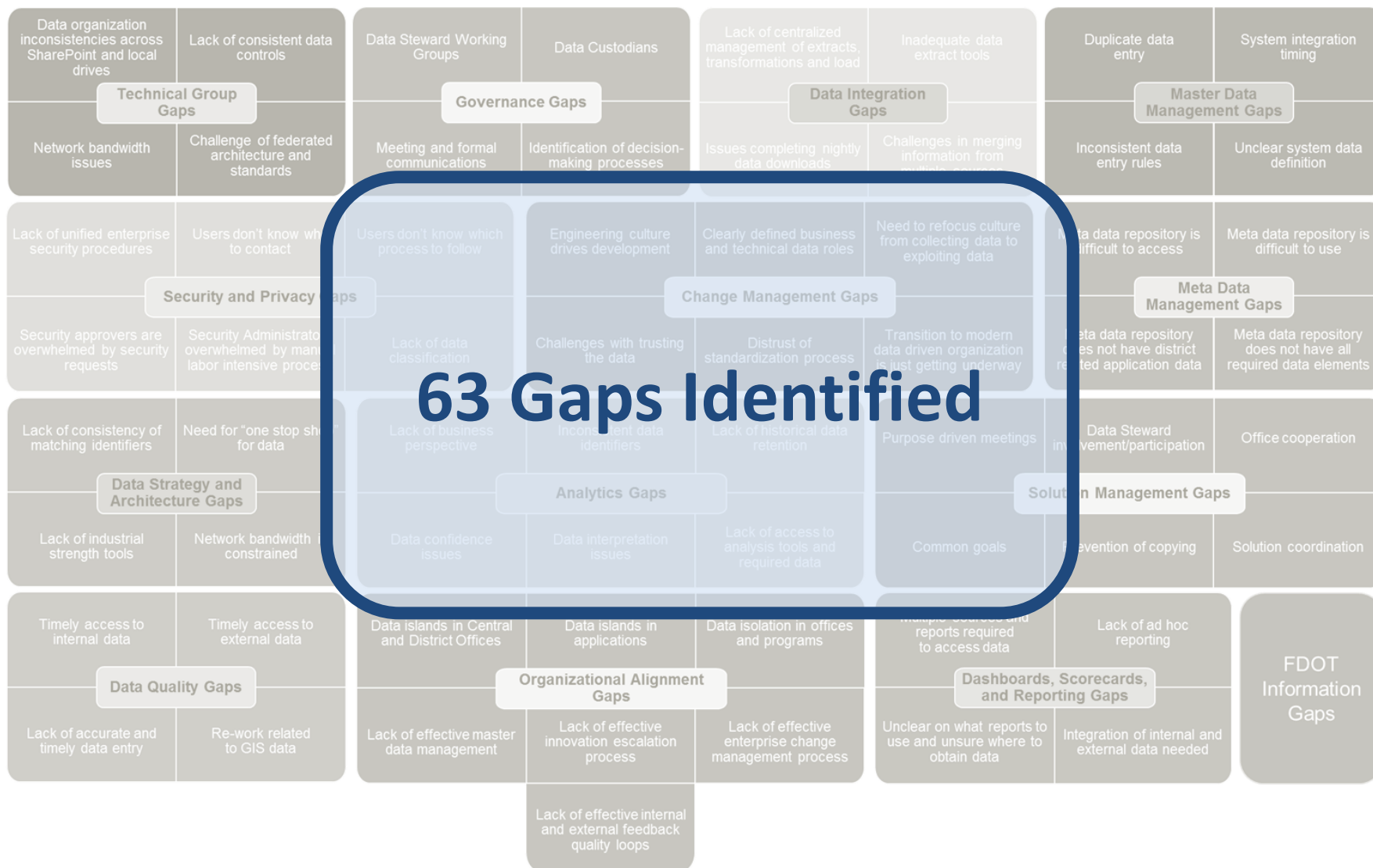
**The extensive amount of effort required to match up information from multiple data sources**

\*additional challenges were provided in ROADS Project Deliverable 2

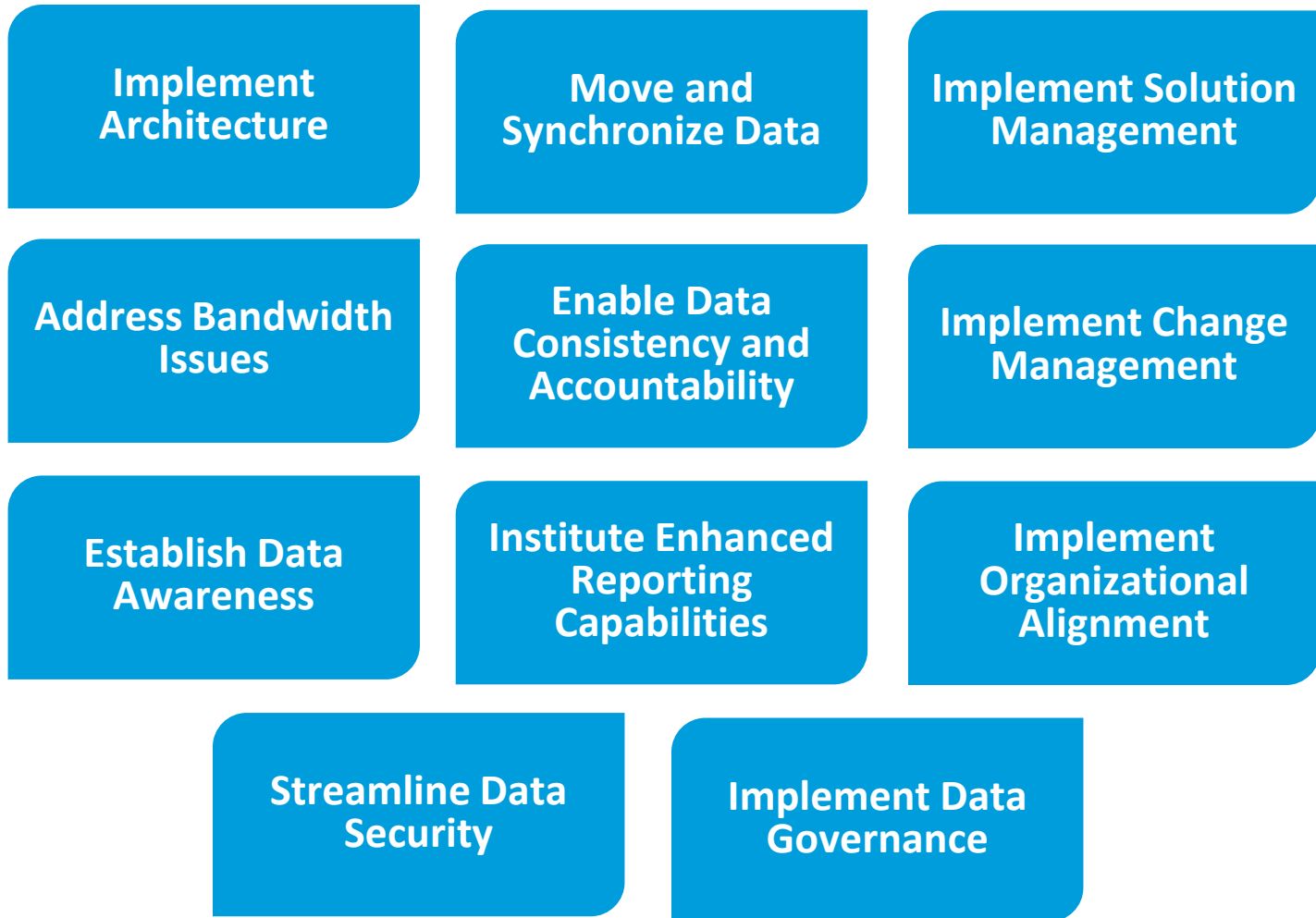
# Gaps Identified



# Gaps Identified

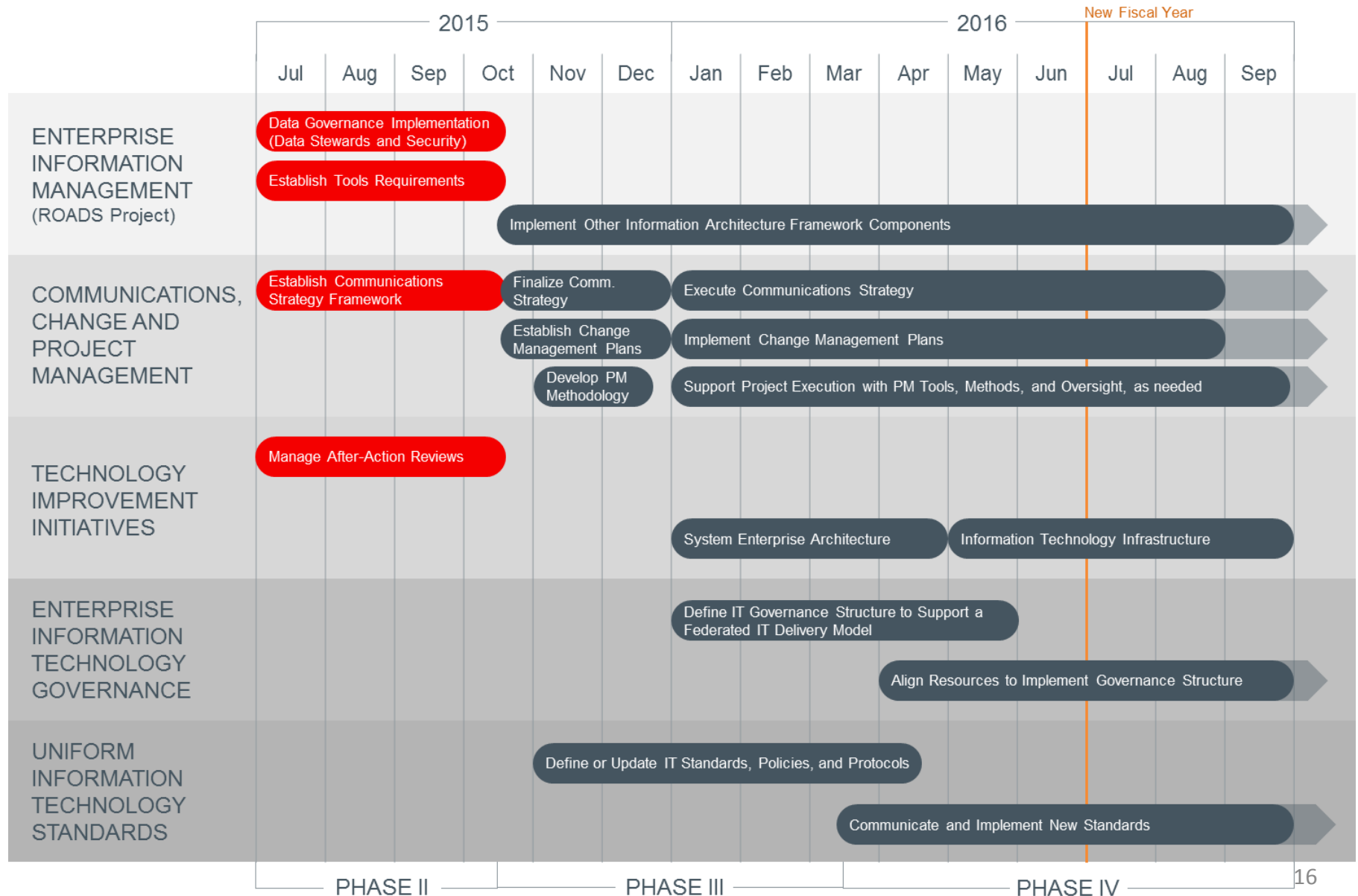


# Solutions Identified



# IT Strategic Plan Timeline

Phase II  
Future Phases





# ROADS Project Next Steps – Phase II

For Phase II we will be:



## ADDRESSING BANDWIDTH ISSUES

### **Immediate Increase in Bandwidth and Submission of Legislative Budget Request (LBR)**

- Funding was identified to increase bandwidth. FDOT users should begin to immediately see the affects.
- LBR will be included in the Department's proposed budget for the upcoming legislative session
- Will increase annual funding for additional bandwidth across FDOT (all districts and central office)

# ROADS Project Next Steps – Phase II

For Phase II we will be:



## ADDRESSING BANDWIDTH ISSUES



## IDENTIFYING DATA STEWARDS AND CUSTODIANS

**Data Steward:** Business users with expert knowledge of business processes, how data is used within those processes, and typically the “go to” person within their business group for all data related questions.

**Data Custodian:** Focus on the underlying infrastructure (technical environment, databases, etc.) and activities required to keep the data intact and available to users.

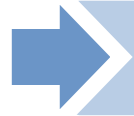
- Statewide identification of Data Stewards is underway
- Working sessions to set up structures and processes

# ROADS Project Next Steps – Phase II

For Phase II we will be:



## ADDRESSING BANDWIDTH ISSUES



## IDENTIFYING DATA STEWARDS AND CUSTODIANS



## DEVELOPING REQUIREMENTS FOR TOOLS

- Determining needs throughout the districts and central office for tools that would be procured
  - For example, reporting tools
- Take steps to begin procuring the tools to implement identified solutions

# ROADS Project Impact on FDOT

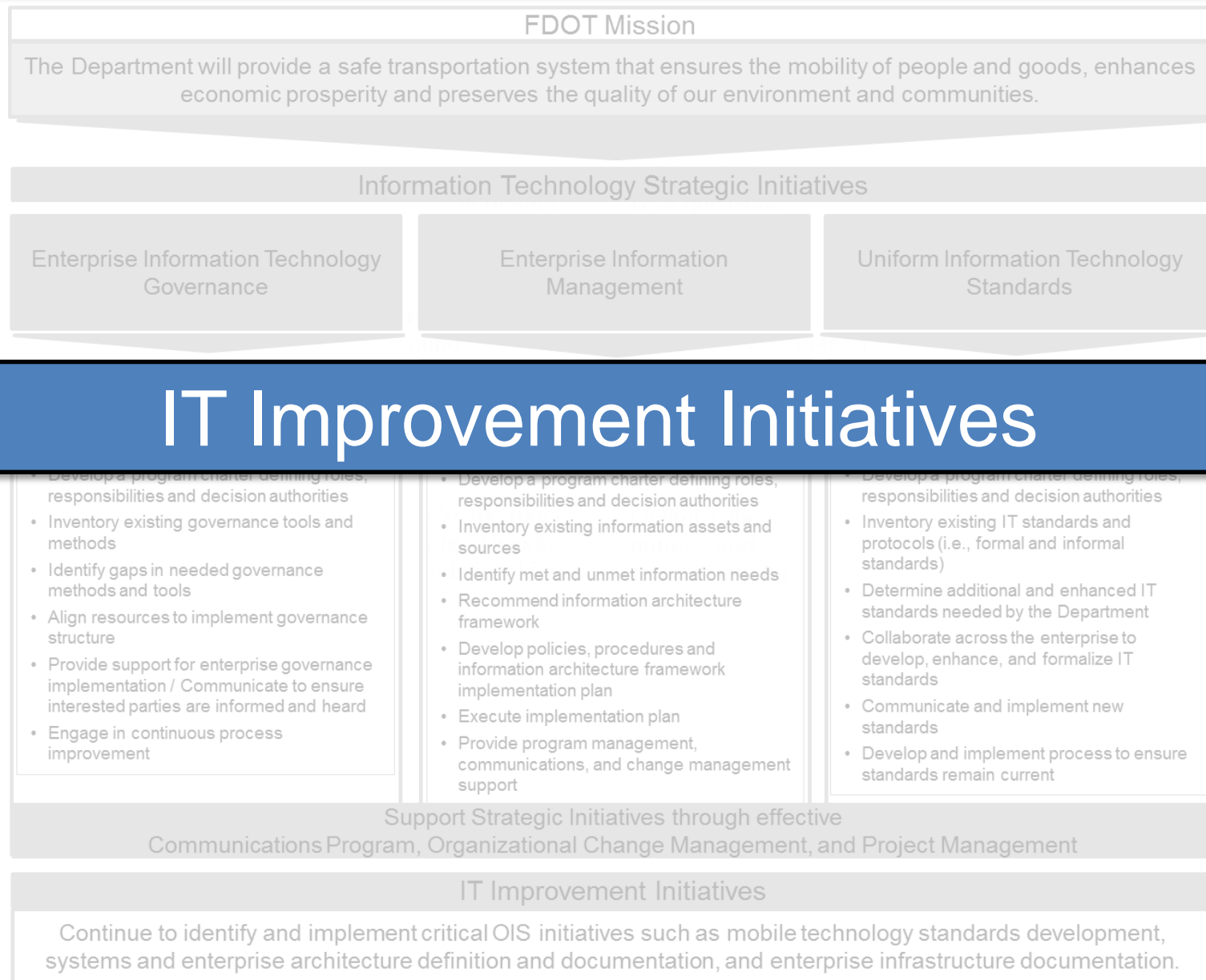
## Short-Term Impact

- Staff will participate in district and central office interviews to identify stewards and aid in shaping the tool requirements
- Identified data stewards and custodians will actively be a part of the new data governance team
- Staff will notice improved speed of the network
- Increased and improved interaction between all offices (district and central)

## Long-Term Impact

- Streamline information to enable better, faster decisions
- Remove barriers currently in place that prevent efficient sharing of information
- Phased roll-out over the next few years with notable changes along the way
- Potentially lead to data only being entered into one application instead of multiple
- Lead to assessing the ability to phase-out certain redundant applications
- Improve data reliability and simplify data sharing across FDOT

# IT Improvement Initiatives



# IT Improvement Next Steps – Phase II

For Phase II we will be:



## Conducting After-Action Reviews

**After-Action Reviews: Completing comprehensive assessments on projects undertaken by OIS in the past to determine characteristics about what went well and where there are opportunities for improvement.**

- Identify a sampling of IT projects
- Travel to the Central Office and Districts to interview stakeholders and gain valuable feedback
- Compile an assessment of findings and provide high-level recommendations

# Communications

## FDOT Mission

The Department will provide a safe transportation system that ensures the mobility of people and goods, enhances economic prosperity and preserves the quality of our environment and communities.

## Information Technology Strategic Initiatives

Enterprise Information Technology  
Governance

Enterprise Information  
Management

Uniform Information Technology  
Standards

# Communications, Organizational Change Management, and Project Management

methods and tools

- Align resources to implement governance structure
- Provide support for enterprise governance implementation / Communicate to ensure interested parties are informed and heard
- Engage in continuous process improvement

- Recommend information architecture framework
- Develop policies, procedures and information architecture framework implementation plan
- Execute implementation plan
- Provide program management, communications, and change management support

- Determine additional and enhanced IT standards needed by the Department
- Collaborate across the enterprise to develop, enhance, and formalize IT standards
- Communicate and implement new standards
- Develop and implement process to ensure standards remain current

Support Strategic Initiatives through effective  
Communications Program, Organizational Change Management, and Project Management

## IT Improvement Initiatives

Continue to identify and implement critical OIS initiatives such as mobile technology standards development, systems and enterprise architecture definition and documentation, and enterprise infrastructure documentation.

# Communications Next Steps – Phase II

For Phase II we will be:



## Developing Communications Strategy Framework

**Communications Strategy Framework: Guidelines that will outline processes and methods for effective communications by OIS within the Department including roles, responsibilities, plans, etc.**

- Determine the current 'As-Is' state of communications with OIS
- Perform a stakeholder analysis internal and external to the Department
- Develop a communications matrix
- Conduct an initial review of current communications policies and templates



# Thank You

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**THANK YOU FOR ATTENDING THE  
FLORIDA TRANSPORTATION DATA SYMPOSIUM**

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